

Fig. 1

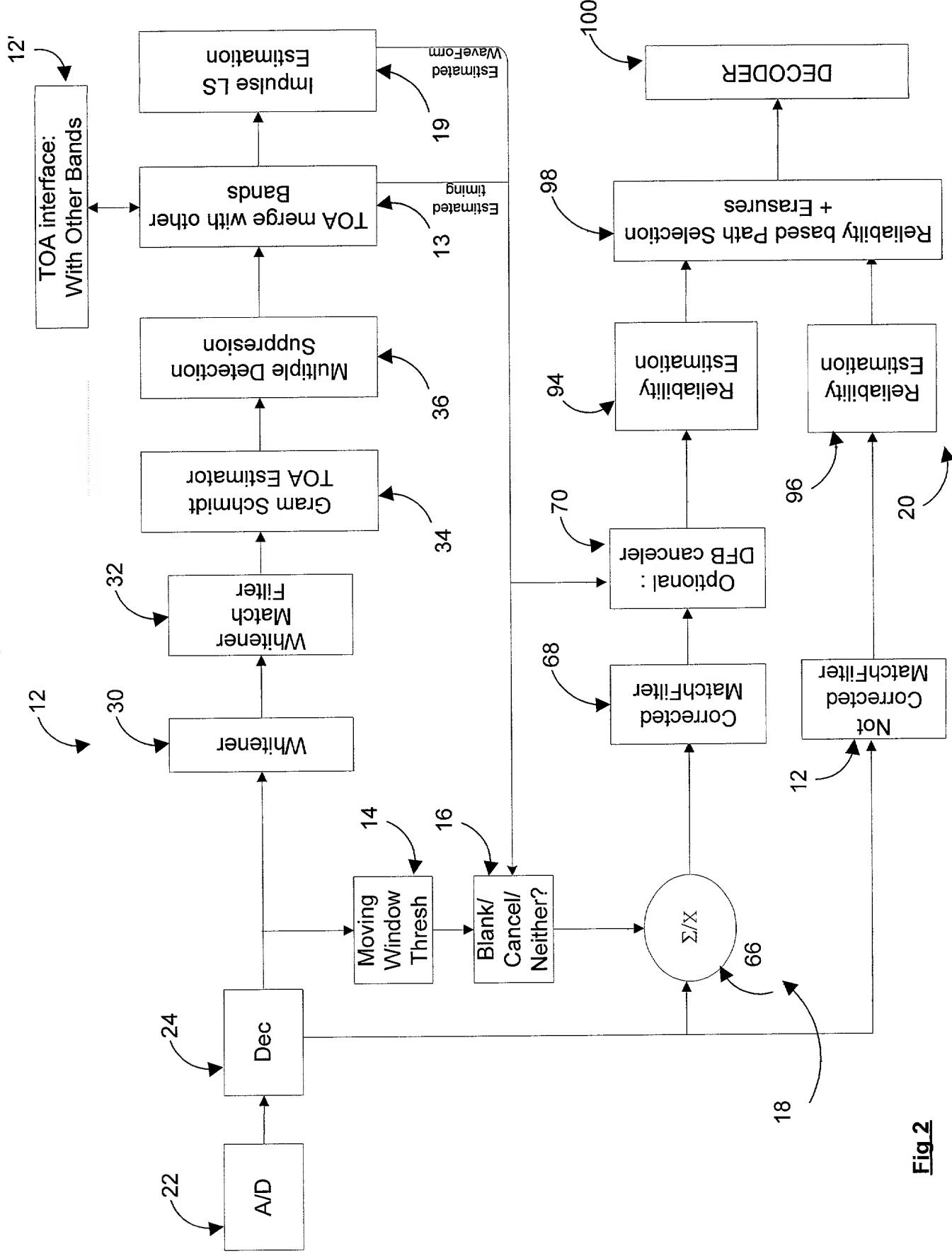
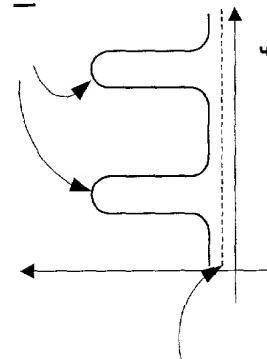


Fig.2

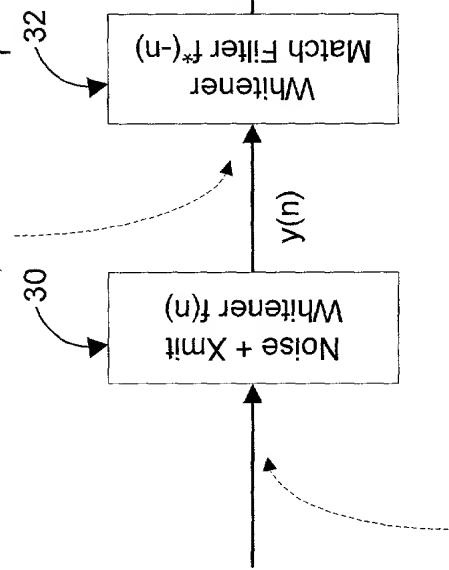
Impulse (on quiet tones)



Whitened Comm Signal
(Noise source
for blunker)

Xmit +
Noise

f



34

$y(n)*f*(-n)$

32

$y(n)$

30

Whitener $f(n)$

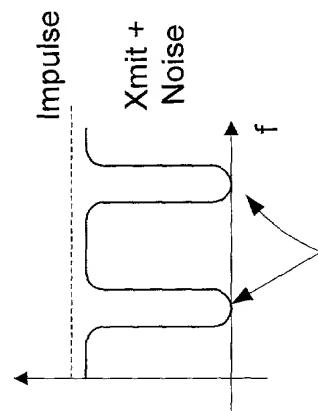
Match Filter $f*(-n)$

Oldest sample
thrown out

40

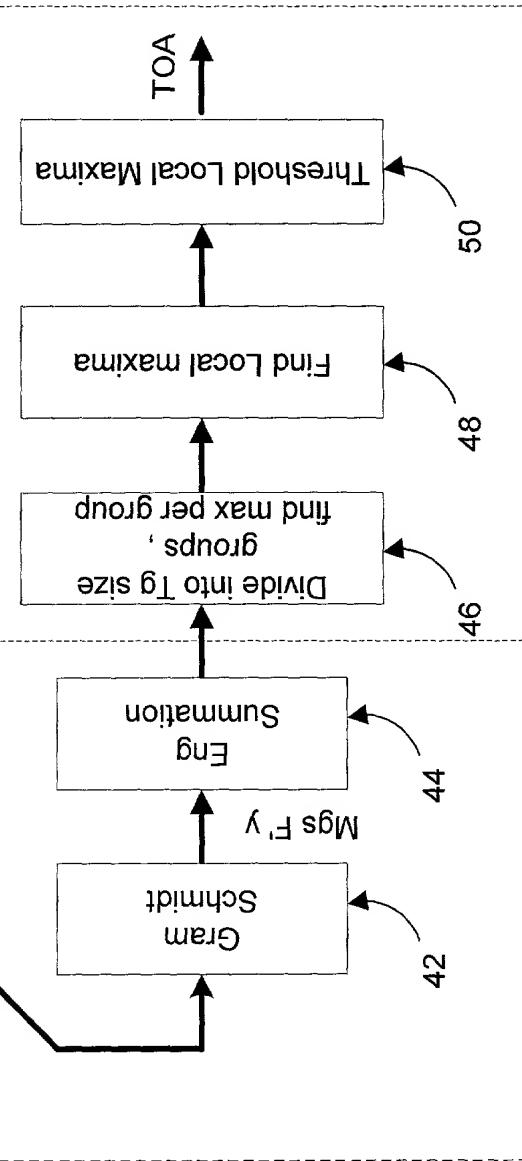
36

$FIFO y(n:n+Ti-1)$



quiet tone
frequencies

Fig.3



50

48

46

44

find max per group

Find Local maxima

Threshold Local Maxima

TOA

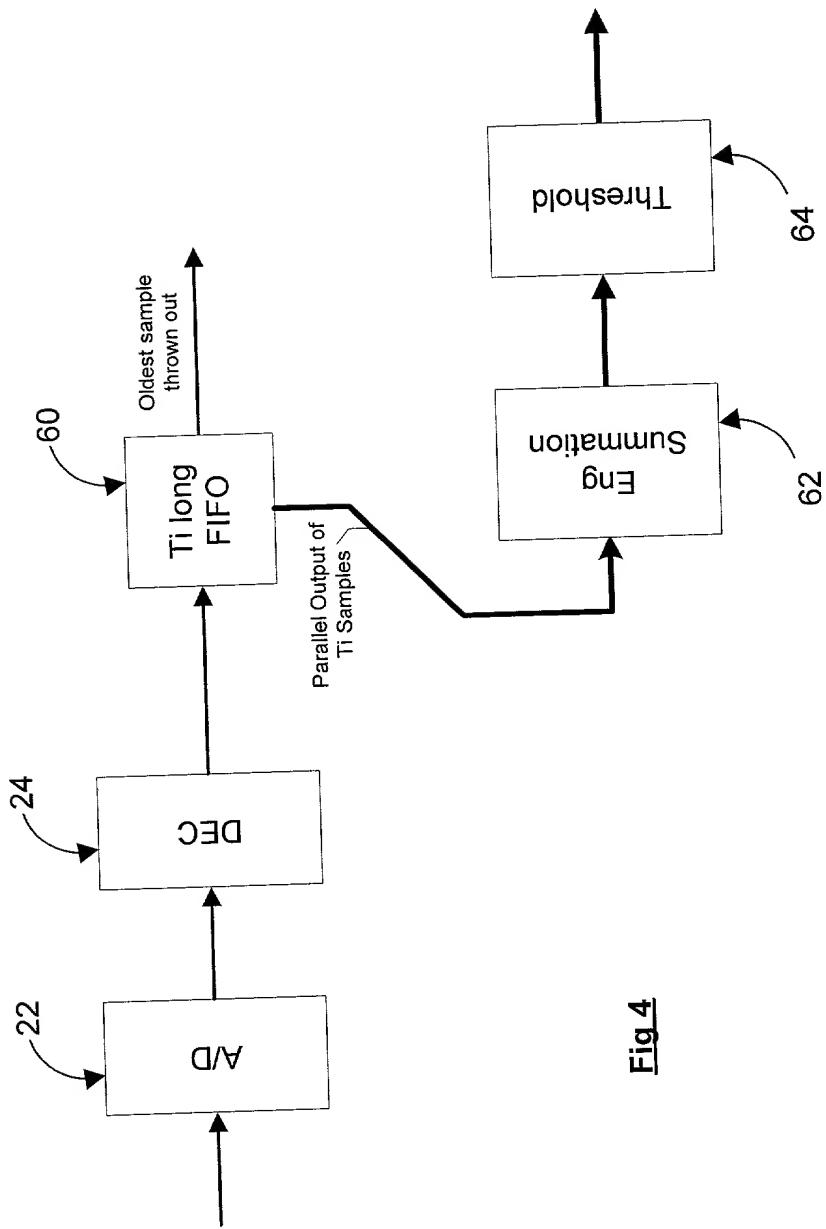


Fig.4

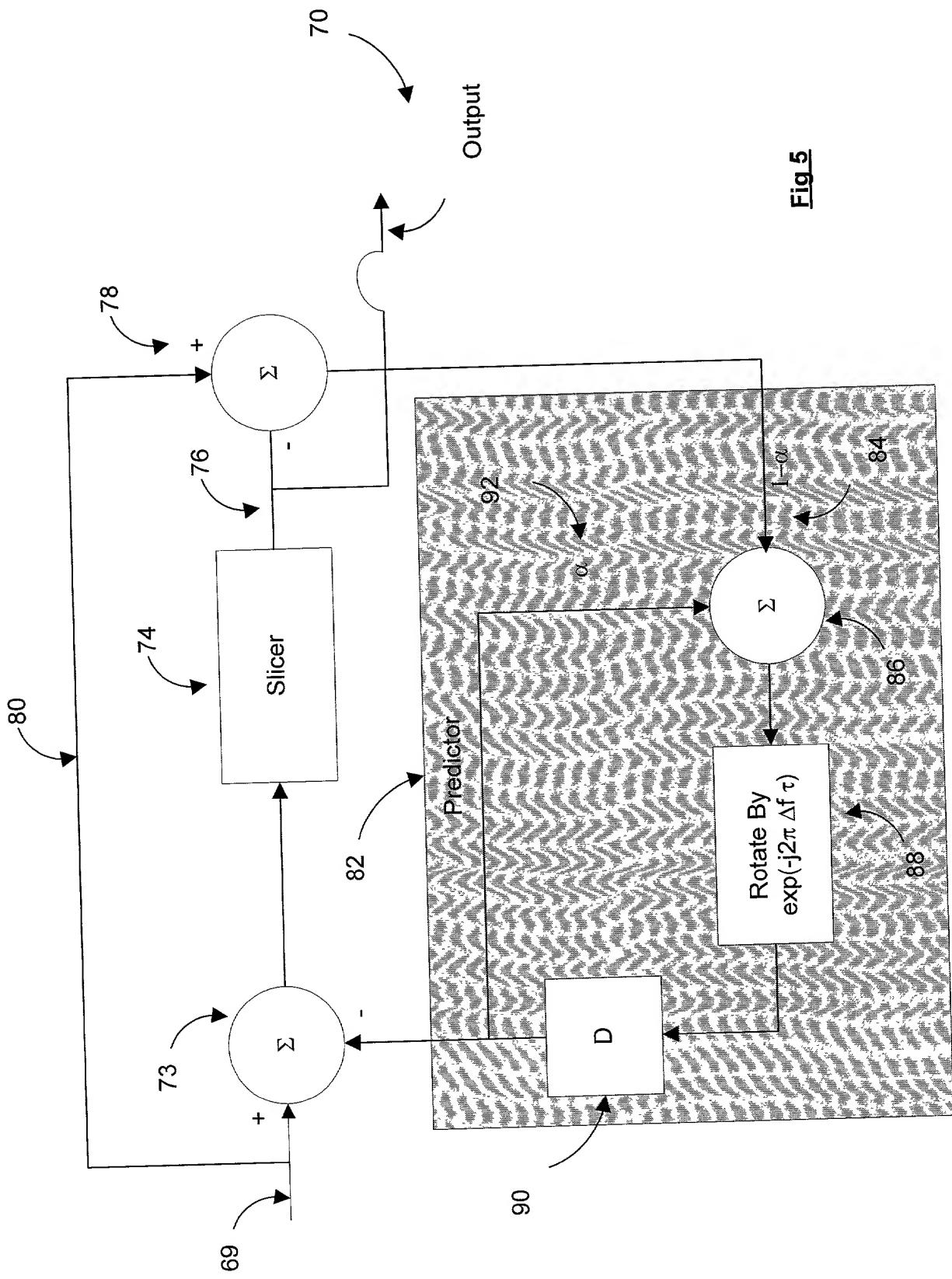


Fig 5